

X. *An Account of some Electrical Experiments made at his ROYAL HIGHNESS the PRINCE of WALES's House at Cliefden, on Tuesday the 15th of April 1738. where the Electricity was conveyed 420 Feet in a direct Line. By the Same.*

HAVING heard that Electricity had been carried along an hempen String five or six hundred Foot long, but having only seen it when the String was carried backwards and forwards in a Room by *Silk Supporters*, I was willing to try it with a Packthread String stretch'd out at full Length; for which Purpose having join'd a Cat-gut String of six Foot long, I fasten'd it to the Inside of a Door in the Suite of Rooms at *Cliefden*; and having also tied another Cat-gut, like the first, to the other End of the String, I tied it up to the Inside of the Door at the other End of the House; but at the Place where the Packthread was join'd to the Cat-gut, I left a Foot and an half of Packthread hanging down, and fasten'd to it a *Lignum Vitæ* Handle of a Burning-Glass. Then applying a rubb'd Tube at the other End of the String, I made the Electricity run to the *Lignum Vitæ*, but with some Difficulty, which I attributed to the Size, being an animal Substance that still stuck to the Packthread as it was new; therefore I caus'd the Packthread to be wet with a Sponge from one End to the other, to wash off the Size: Then was the Electricity from the Tube communicated very soon and very strongly; for the

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Thread

Thread of Trial (mention'd in my former Papers) was drawn by the *Lignum Vitæ* at the Distance of a Foot.

Afterwards having join'd more Packthread together, I made a String of four hundred and twenty Foot long, one End of which I fasten'd (by the Interposition of Cat-gut as before) to the Iron Gates in the Garden, before the House, and the End which had the *Lignum Vitæ* Handle, to the upper Part of the Door next to the Back-side of the House in a large Drawing-Room, taking care that the String came through the middle of the open'd Doors through which it pass'd; and to prevent this String dragging upon the Ground, three Pieces of Cat-gut held across by two Men, at equal Distances from the Ends, and from each other, supported it. The String was altogether dipp'd in a Pail of Water, before the Experiment; but great Care taken, that the Cat-gut should not be wet.

Then I applied the rubb'd Tube at the End in the Garden, whilst my Assistant held the Thread of Trial near the Handle above-mention'd, which Thread was strongly attracted, though the Wind was very high, and blow'd in the contrary Direction to that in which the Electricity ran along.

I first tried the Experiment with the Packthread dry, but then it would not do at that Distance.

*N. B.* The Weather was moist when I made the Experiment.